IN THE ABSTRACT

Please amend the Abstract as follows:

-- ABSTRACT

A signal processing device which outputs a discrete signal composed of a string of the sampling values and parameters m signal.—There is provided a new signal processing device that uses functions appropriate to signal properties to acquire high-quality signals. The signal processing device includes a sampling circuit which2 that samples an input signal and outputs a discrete signal, multiple function generators which 3 that generate multiple sampling functions with parameters m different from each other, plural inner product operating units [4-] for each of the parameters m that take an inner product between the input signal and each of plural sampling functions and output an inner product operating value, and a judging unit which 8 that determines parameter m providing a minimum error out of multiple errors composed of differences between the sampling value and inner product operating values output from the multiple inner product operating units and outputs the parameters parameter m signal. The signal processing device outputs a discrete signal composed of a string of the sampling values and the parameter m signal. --